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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,086	10/16/2001	Jurgen Adamek		5383

7590 05/02/2003
Dr. Max Fogiel
61 Ethel Road West
Piscataway, NJ 08854

EXAMINER

SICONOLFI, ROBERT

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/981,086

Applicant(s)

ADAMEK ET AL.

Examiner

Robert A. Siconolfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Amendment filed on 1/14/03 has been received.

Drawings

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 1/14/03 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(f) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the polygonal halves or the knife-like projections.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1- 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 17 refer to the piston as "a body" but further claim the tension is adjusted by "deforming said body ... against said body". There is also in claim 7 and later on in claim 17 "said body for applying said tension". The examiner is unclear as to the number of bodies being claimed.

Furthermore, it appears the applicant is crossing embodiments. Claim 11 discloses a bead left from welding forming a collar. This is shown in figure 3. Claim 11 depends

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from claim 3 which requires a collar at each end of the bolt. This is only shown in figure

4. Similar problems exist with claims 12, 15 and 16.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by May (U. S. Patent no. 5,259,294).

See figures 1-13 bolt 3 with collars 28,24, piston halves 10,11, cup springs 25, adjusted by collars, mutually engaging elevations and depressions on the piston halves see figure 1, accommodating a polygonal bolt see figures 11 and 12.

Note the specification states that the springs may be tensioned by elements fixed in place (by welding). Therefore the collars of May read on the limitation of claim one regarding the adjusting of the tension.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over May. May is relied upon as above. May discloses metal piston halves. May does not disclose sintered metal used for the piston halves. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sintered metal piston halves as the specific material selection is merely a design choice based on factors such as cost and weight.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over May in view of De Koning et al (U. S. Patent no. 2,888,107).

May is relied upon as above in paragraph 6. May does not teach the use of nuts on each end to allow for the adjustment of the tension of the cup springs. De Koning et al teaches the use of two threaded nuts to separately adjust the tension in the cup spring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a nut on each end as taught by De Koning et al in the device of May to allow for easier adjustment in both directions as opposed to the single direction as taught by May.

10. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over May in view of Deferme (U. S. Patent no. 6,371,264).

May is relied upon as above in paragraph 6. May does not disclose two bolt halves with a continuous groove and nose sections. Deferme teaches two bolt halves with a

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continuous groove and nose sections. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use bolt halves as taught by Deferme in the device of May in order to reduce costs. Individual sections can be threaded rather than the end of an entire piston rod. This prevents the entire rod from being scrapped just because the small threaded section is out of tolerance. Only the small threaded section would be recycled. Also it allows the tolerances of each section to be as high as allowed for that particular part rather than meet the tolerances of the section that needs the tightest tolerances.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Siconolfi whose telephone number is (703) 305-0580. The examiner can normally be reached on M-F 10 am-3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

RS
April 27, 2003

Robert A. Siconolfi
Examiner
Art Unit 3683


JACK LAVINDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

4/28/03